LIBRARY MANAGEMENT SYSTEM

1.CREATING SCHEMA:

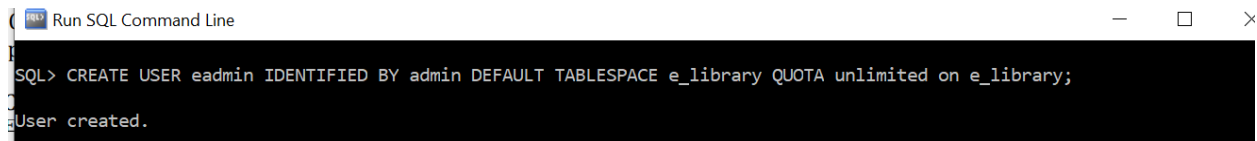Step 1: Connect to database:

C:\>sqlplus system/1234

Step 2: Create table space:

CREATE TABLESPACE e_library   DATAFILE 'e_library.dat' SIZE 1M AUTOEXTEND ON;

Step 3: Create a new user in Oracle

CREATE USER eadmin IDENTIFIED BY admin DEFAULT TABLESPACE e_library QUOTA unlimited on e_library ;


```
SQL> CREATE USER eadmin IDENTIFIED BY admin DEFAULT TABLESPACE e_library QUOTA unlimited on e_library;

User created.
```

Step 4: Grant permissions

GRANT create session TO eadmin;
GRANT create table TO eadmin;
GRANT create sequence TO eadmin;

Step 5: Disconnect from system account and connect to eadmin

Conn edmin/admin;

Step 6: Create tables and sequences

I) BOOK TABLE

Create table book (code number(19) primary key,
Bookname varchar2(255),
Author varchar2(255),
Publication varchar2(255),
Subject varchar2(255),
No_of_books number(19));

Create sequence book_seq start with 100 increment by 1;

II)STUDENT INFORMATION TABLE

Create student table (libid number(19) primary key,
 regno number(19),
 branch varchar2(255),
 section varchar2(255),
 semester varchar2(255),
 year_of_adm number(19));

Create sequence student_seq start with 100 increment by 1;

III) TEACHER INFORMATION TABLE

Create teacher table(tid number(19) primary key,
 Name varchar2(255),
Designation varchar2(255),
Branch varchar2(255),
 Contact_no number(19),
Lectures_taken number(19));

Create sequence teacher_seq start with 100 increment by 1;

```
SQL> GRANT create sequence TO eadmin;

Grant succeeded.

SQL> conn eadmin/admin;
Connected.
SQL> create table book (code number(19) primary key,bookname varchar2(255),author varchar2(255),publication varchar2(255),subject varchar2(255),no_of_books number(19));

Table created.

SQL> create sequence book_seq start with 100 increment by 1;

Sequence created.

SQL> create table student (libid number(19) primary key,regno number(19),branch varchar2(255),section varchar2(255),semester varchar2(255),section varchar2(255),year_of_adm
ission number(19));
create table student (libid number(19) primary key,regno number(19),branch varchar2(255),section varchar2(255),semester varchar2(255),section varchar2(255),year_of_admissio
n number(19))
                                                                                                                    *
ERROR at line 1:
ORA-00957: duplicate column name

SQL> create table student (libid number(19) primary key,regno number(19),branch varchar2(255),section varchar2(255),semester varchar2(255),year_of_admission number(19));

Table created.

SQL> create sequence student_seq start with 100 increment by 1;

Sequence created.

SQL> create table teacher (tid number(19) primary key,name varchar2(255),designation varchar2(255),branch varchar2(255),contact_no number(19),lectures number(20));

Table created.

SQL> create sequence teacher_seq start with 100 increment by 1;

Sequence created.

SQL>
```

(Connecting to new user i.e eadmin, book table,student table,teacher table,sequence creation)

IV) Issue table to keep track of books issued

```
create table track_of_books(code number(19) references book,
libid number(19) references student,
issue_date varchar2(255),
return_date varchar2(255));
```

```
create sequence track_of_book_seq  start with 100 increment by 1;
```


V) STUDENT LOGIN TABLE

```
CREATE table student_login(libid number(19) references student,
user_name varchar2(255),
password varchar2(55),
books_taken number(19));
```

create sequence student_login_seq start with 100 increment by 1;

VI) TEACHER LOGIN TABLE

CREATE table teacher_login(tid number(19) references teacher,
user_name varchar2(255),
password varchar2(55),
books_taken number(19));

create sequence teacher_login_seq start with 100 increment by 1;

VII) ADMIN DETAILS TABLE

create table admin_details(admin_id number(19) primary key,
name varchar2(255),
password varchar2(255));

create sequence admin_details_seq start with 100 increment by 1;

```
SQL> create table track_of_books(code number(19) references book,libid number(19) references student,issue_date varchar2(255),return_date varchar2(255));

Table created.

SQL> CREATE table student_login(libid number(19) references student,user_name varchar2(255),password varchar2(55),books_taken number(19));

Table created.

SQL> CREATE table teacher_login(tid number(19) references teacher,user_name varchar2(255),password varchar2(55),books_taken number(19));

Table created.

SQL> create sequence track_of_books_seq start with 100 increment by 1;

Sequence created.

SQL> create sequence student_login start with 100 increment by 1;
create sequence student_login start with 100 increment by 1
                *
ERROR at line 1:
ORA-00955: name is already used by an existing object

SQL> create sequence student_login_seq  start with 100 increment by 1;

Sequence created.

SQL> create sequence teacher_login_seq  start with 100 increment by 1;

Sequence created.

SQL> create table admin_details(admin_id number(19) primary key,name varchar2(255),password varchar2(255));

Table created.

SQL> create sequence admin_details_seq  start with 100 increment by 1;

Sequence created.
```
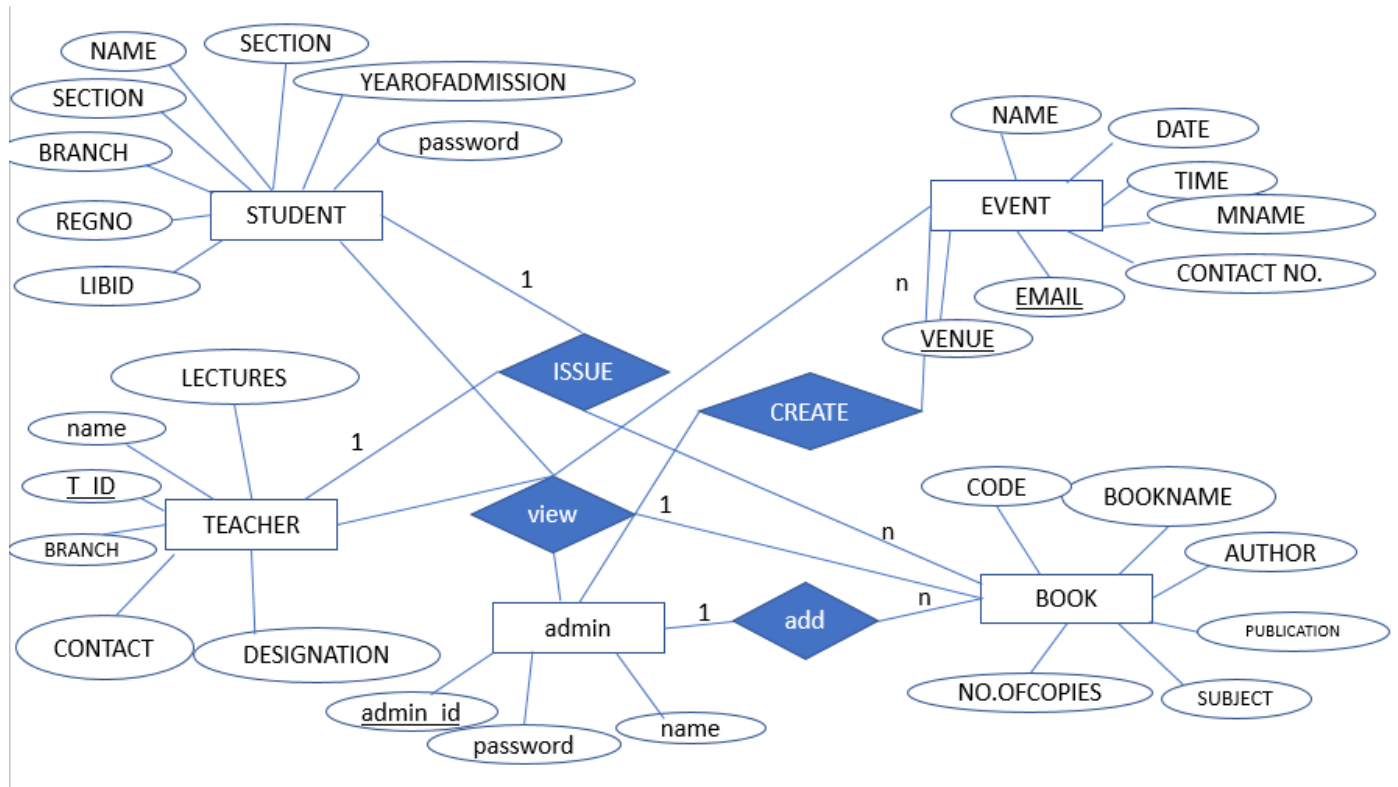
(track of books, student_login,teacher_login,admin-details tables and sequences creation)

VIII) EVENT DETAILS TABLE

create table event_table(name varchar2(255),event_date date,time varchar2(255),Mname varchar2(255),contact_number number(15),email varchar2(255),venue varchar2(255));

```
SQL> create table event_table(name varchar2(255),event_date date,time varchar2(255),Mname varchar2(255),contact_number number(15),email varchar2(255),venue varchar2(25
));

Table created.
```

2. ER DIAGRAM:

3. FORMS:

BOOK DETAILS

Code : _____

Book Name : _____

Author : _____

Publications : _____

Subject : _____

No. of copies : _____

SUBMIT

Student Registration

Libid: _____

RegNo: _____

Name: _____

Branch: _____

Section: _____

Semester: _____

Section: _____

Year of Admission: _____

[SUBMIT]

Student Login

Libid/Username:

Password:

SUBMIT

ADDING ADMIN

Name:

Password:

SUBMIT

Admin Login

id/Name:

Password:

SUBMIT

Teacher Login

Libid/Username:

Password:

SUBMIT

Teacher Registration

Name: _____

Branch: _____
_____

Designation:

Contact Number: _____

Lectures: _____

SUBMIT

BOOK ISSUE TABLE

Book id   :   [   ]

Student id   :   [   ]

Issue date   :   [   ]

Return date   :   [   ]

[SUBMIT]

ADD EVENT

EVENT NAME

DATE

TIME

ORGANIZER NAME

CONTACT_NO

EMAIL

VENUE

SUBMIT